

Accordingly, since the corrugated [plate-like] plate-shaped damper [members are] member is held in a predetermined position without fail even if [they are] it comprises a narrow corrugated strip steel plate, [plates, it is possible that] the corrugated plate-like damper [members are] member is prevented from being offset, thereby preventing [to occur] abnormal contact between the rotor and the touchdown bearing. In addition, since the positional offset preventing means [of] for the above corrugated [plated-like] plate-shaped damper member is simple in structure, it is possible to reduce [the] an increase [of] in the manufacture cost [thereby] as much as possible. Furthermore, there is no positional offset, and there is no unduly strong external force. Thus, the durability of the corrugated [plate-like] plate-shaped damper member per se is enhanced and the necessity to exchange such part [the parts upon] [the] during overhaul is obviated.

**IN THE CLAIMS:**

Claims 1-6 have been amended as follows:

1. (Amended) A magnetic bearing apparatus comprising: [provided at least with] a rotor shaft[,]; a radial magnetic bearing for supporting [said] the rotor shaft in a radial direction[,]; a thrust magnetic bearing for supporting [said] the rotor shaft in an axial direction[,]; a

touchdown bearing [composed of a pair of roller bearings arranged to surround] surrounding a lower end portion of [said] the rotor shaft[, and]; a retainer member for supporting the touchdown bearing; a corrugated plate-shaped [plate-like] damper [member] disposed in [inserted into] an annular gap between [said] the touchdown bearing and [its] the retainer member[, characterized by comprising a]; and positional offset preventing means [of said] for preventing a positional offset of the corrugated plate-shaped [plate-like] damper [member provided in said annular gap].

2. (Amended) [The] A magnetic bearing apparatus according to claim 1[, characterized in that said]; wherein the corrugated plate-shaped [plate-like] damper [member is composed of] comprises a pair of corrugated plate-shaped [plate-like] damper members; and [said] wherein the positional offset preventing means [is] comprises a [metal] thin metal plate interposed between [said] the pair of corrugated plate-shaped [plate-like] damper members.

3. (Amended) [The] A magnetic bearing apparatus according to claim 1[, characterized in that said]; wherein the corrugated [plate-like] plate-shaped damper [member is composed of] comprises a pair of corrugated [plate-like] plate-shaped damper members; and [said] wherein the positional

offset preventing means comprises [is] an annular convex portion formed in an inner circumferential surface of [said] the retainer member for separating [said] the pair of corrugated [plate-like] plate-shaped damper members [up and down].

4. (Amended) [The] A magnetic bearing apparatus according to claim 1[, characterized in that said]; wherein the positional offset preventing means [is] comprises an annular concave portion formed in an inner circumferential surface of [said] the retainer member for receiving [said] the corrugated [plate-like] plate-shaped damper [member].

5. (Amended) [The] A magnetic bearing apparatus according to claim [2, 3 or 4, characterized in that a thickness of a metal thin plate, a sum  $(T+t)$  of a height of annular convex portion or a depth of an] 4; wherein a sum of a depth of the annular concave portion [T] and a thickness [t] of [a] the corrugated plate-shaped damper [strip steel plate] is 0.8 to 1.3 times [of] a width [ $\delta$ ] of the annular gap.

6. (Amended) A vacuum pump [provided with the] having a magnetic bearing apparatus according to claim 1.